



TRAVEL MARKET SUMMARY

EXECUTIVE COMMITTEE MEETING

OCTOBER 19, 1999

Summary of Travel Market Data:

Total Daily Person Trips in the Study Area and Region

- Total daily person trips in the study area are expected to grow from 3,180,000 to 4,950,000 between 1995 and 2020. This is an increase of 56 percent. During the same period, total daily person trips in the four-county region are expected to grow from 11,231,000 to 17,141,000 trips which is an increase of 52 percent. These increases translate into about a 1.8% increase per year for study area trips and 1.7% for trips in the region as a whole.

Trip Purpose

- Today, about 20% of the total daily person trips in the study area are home-based work trips, 39% are home-based other (e.g., shopping, recreational, personal business) trips and 28% are non home-based trips (e.g., traveling from work to daycare or shopping). Other trip purposes include school trips (2%) and commercial vehicles (11%). The relative shares of each trip purpose are expected to be similar in 2020. The relatively small share of trips which are purely home-to-work or work-to-home trips reflects the fact that people increasingly are linking their trips, stopping on the way home to shop, pick up children, etc.(which are considered non home-based trips).
- The relative shares of each trip purpose for the region as a whole are similar to those for the study area, but with a somewhat larger share of home-based other trips (at 43%).

Trip Distribution

- Currently, 55% of all study area-generated trips, or 1,748,000 daily trips, both begin and end in the study area. 1,430,000 trips or 45% have only one trip end in the study area. Only about 15,000 daily person trips are estimated to pass through the study area using I-405. The relative proportions of each trip type (both ends in the study area versus one end in study area) are forecast to stay about the same into the future.
- There are around 41,000 daily person trips passing through King County between North Snohomish County or points north and South Pierce County and points south today. The travel market analysis revealed I-5 as the primary travel corridor for these "through" trips both now and in the future: 63% of the trips are estimated to be on I-5, 19% are on I-405, and the remaining 18% are on alternative routes, such as major arterials (SR-509, SR-99, etc.).

- By 2020, trips passing through King County (in a north-south orientation) are expected to grow to around 83,000 under the No Action (committed transportation system) Alternative. More trips are expected to travel on the arterials at around 29% of all daily person trips. Relatively fewer trips passing through King County are expected to be on I-405 in 2020 (11% of all through trips). This can be interpreted as saying that in 2020, longer trips will not use I-405 unless they have one or both ends of the trip in the study area. I-5 remains as the main north-south corridor for through trips capturing 60% of the through trips.
- Of all the through trips passing through King County (north-south), only around 7,100 are external to external trips, that is, from points north of Snohomish County to/from points south of Pierce County. Among these external-external trips, it is estimated that only around 700 external-external trips currently use I-405 with the remaining trips primarily on I-5. Even fewer of these trips will use I-405 in 2020. Both I-5 and I-405 will be heavily congested but I-5 provides a more direct route for many of the trips (i.e., shorter in distance).

Trip Lengths

I-405

- For the trip length analysis, the study corridor was divided into three segments: 1) south segment (in Renton, south of SR-900), 2) central segment (near Bellevue), and 3) north segment (north of Totem Lake).
- Today, on the south segment of I-405, around 7% of all the trips in the study area are less than 10 miles, 37% are between 10-30 miles, and 56% are greater than 30 miles. By 2020, only 3 % of the trips are expected to be less than 10 miles, 21% between 10-30 miles, and 76% greater than 20 miles. The average trip length is 34 miles in 1995 and is forecast to be 42 miles in 2020 using this segment.
- In the central segment on I-405 about 25% of trips are less than 10 miles, 40% between 10-30 miles, and 35% greater than 30 miles. In 2020, 21% of the trips are expected to be less than 10 miles, 32% between 10-30 miles, and 47% greater than 30 miles. Today, the average trip length of trips using this segment is estimated to be 23 miles and is forecast to be 27 miles in 2020.
- In the north segment on I-405, around 14% of the trips are less than 10 miles, 49% are between 10-30 miles, and 37% are greater than 30 miles. By 2020, trips less than 10 miles are expected to constitute 11% of all trips, trips 10-30 miles 41% and trips greater than 30 miles, 48%. The average trip length today is estimated to be 24 miles, growing to 28 miles in 2020.
- Overall, I-405 has a much greater percentage of medium to long trips with 3 to 4 times as many in comparison to the region as a whole.

Parallel Arterials

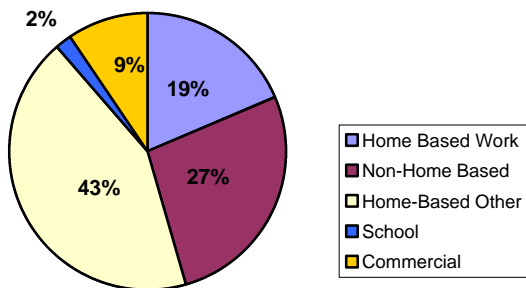
- As part of the trip length analysis, trip lengths on arterials which run parallel to I-405 were also examined in comparison to the trips on I-405. Three arterials were analyzed in similar locations to the southern, central and northern segment of the I-405 trip length analysis at the following locations: 1) Coal Creek Parkway, north of Renton (southern arterial), 2) 148th Avenue NE, north of NE 8th Street (central arterial), and 3) SR-202, east of Totem Lake (northern arterial).

- Today, around 48% of all the trips are less than 10 miles, 48% are between 10-30 miles, and 4% are greater than 30 miles in the southern arterial. In 2020 on Coal Creek Parkway, 55% of all trips are expected to be less than 10 miles, 35% between 10-30 miles, and 10% greater than 30 miles. The average trip length today for trips using Coal Creek Parkway is estimated to be 11 miles and is forecast to be 12 miles in 2020.
- On the central arterial, about 56% of trips are less than 10 miles, 30% between 10-30 miles, and 14% greater than 30 miles. In 2020 on 148th Avenue, more trips are expected to be longer with 37% less than 10 miles, 29% between 10-30 miles, and 34% greater than 30 miles. The average trip length today on 148th at this location is estimated to be 14 miles and is forecast to be 21 miles in 2020.
- On the northern arterial, around 50% of the trips are less than 10 miles, 41% are between 10-30 miles, and 9% are greater than 30 miles. By 2020, 44% are anticipated to be less than 10 miles, 40% between 10-30 miles, and 16% greater than 30 miles. The average trip length today on SR 202 near Totem Lake is estimated to be 13 miles and is forecast to be 16 miles in 2020.

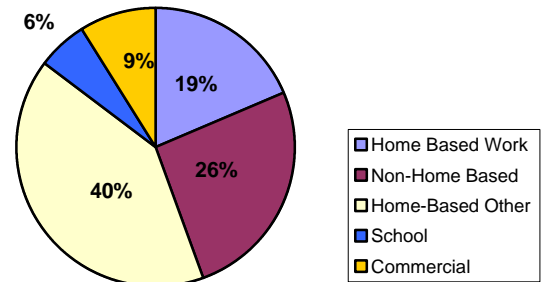
Mode Shares

- In the study area, SOV is the predominant mode. Less than 2% of the total daily person trips and 5% of the work trips are made by HOV/transit with HOV defined as 3+ carpools. These percentages can be compared with the region as a whole which has a slightly higher percentage of HOV/transit use. Three percent of total daily trips and 10% of work trips are by HOV/transit in the region.
- By 2020, more HOV/transit use is expected with over 16% of work trips in the study area and 18% in the region in HOV/transit under the No Action Alternative. (Note that Phase One of the *Sound Move* Regional Transit System Plan is assumed to be in place since it has committed funding.)

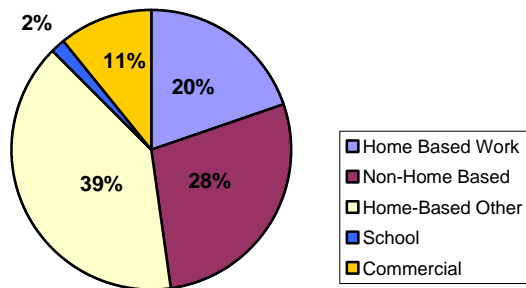
**1995 Total Daily Person Trips by Trip Purpose:
Region**



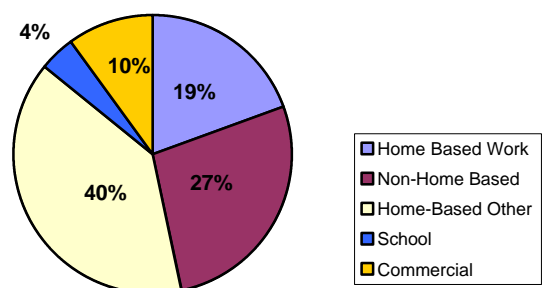
**2020 Total Daily Person Trips by Trip Purpose:
Region**



**1995 Total Daily Person Trips by Trip Purpose:
Study Area**



**2020 Total Daily Person Trips by Trip Purpose:
Study Area**

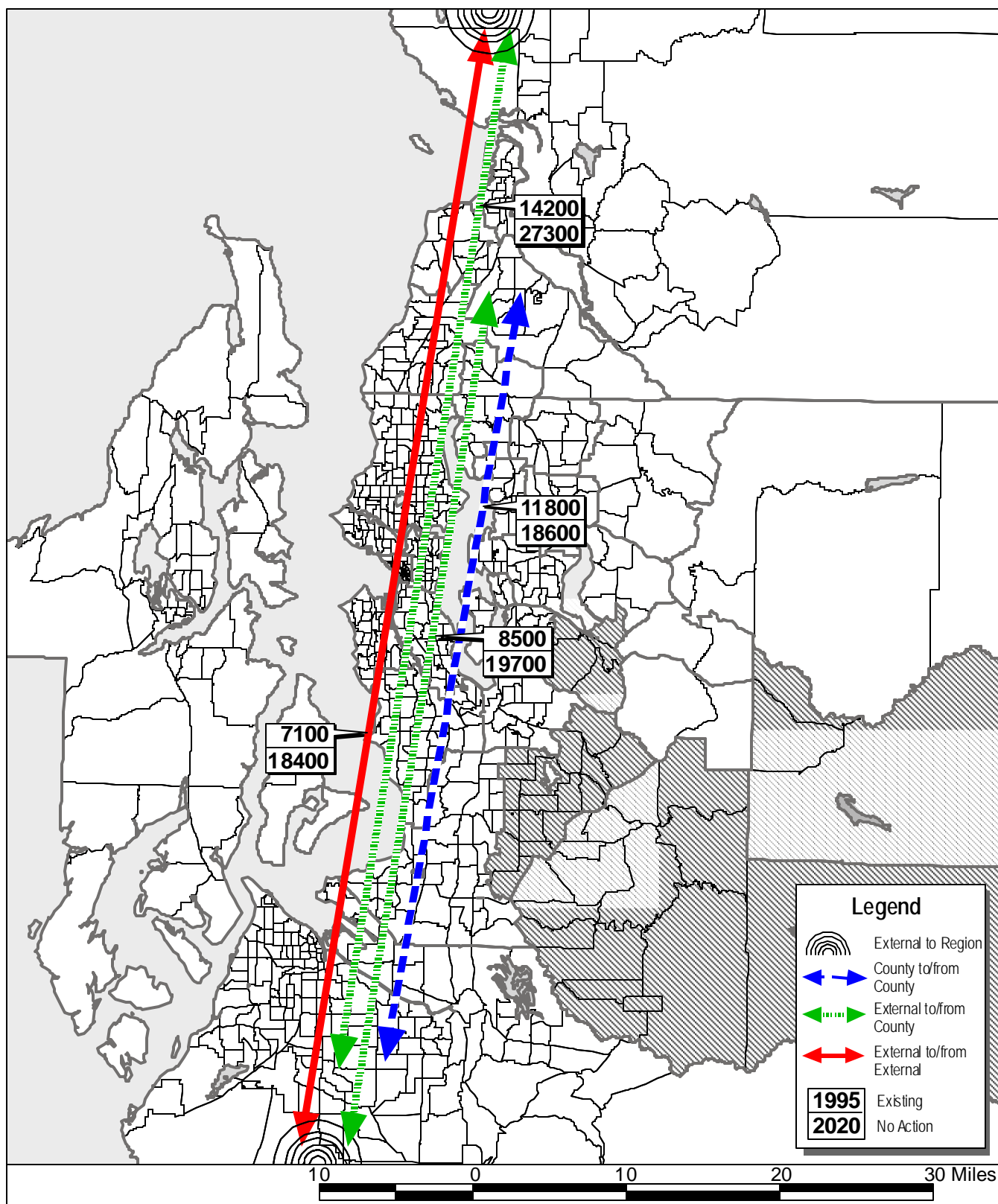


1995 and 2020 Daily Person Trips by Trip Purpose Region vs. Study Area

(Source: PSRC Model)

Travel Markets Analysis





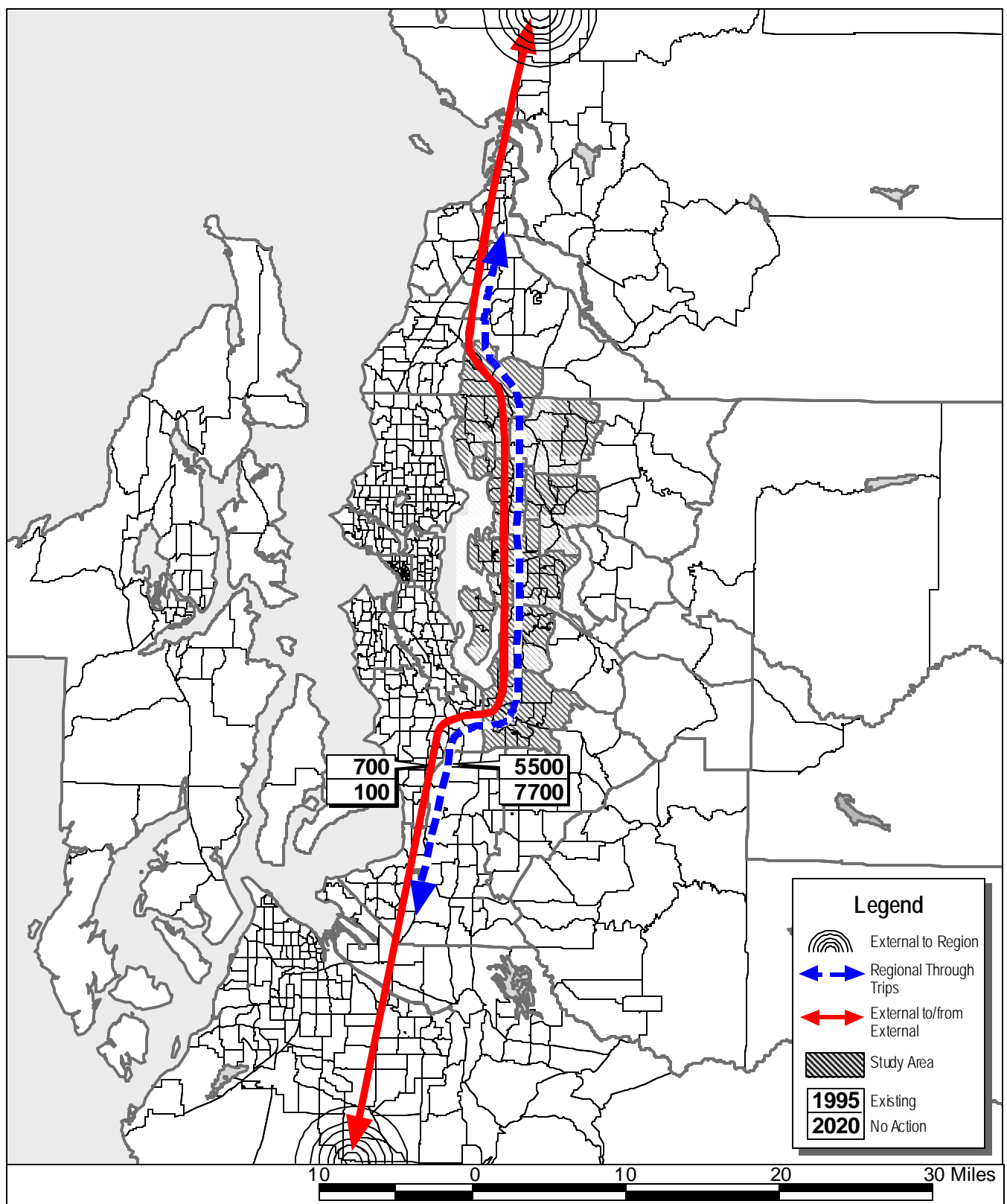
Distribution of Trips Passing Through King County from Pierce, Snohomish and Externals

(Source: PRSC Model)

Travel Market Analysis



08/27/1999



Trips Passing Through I-405 Study Area to/from King, Pierce, Snohomish County and Externals

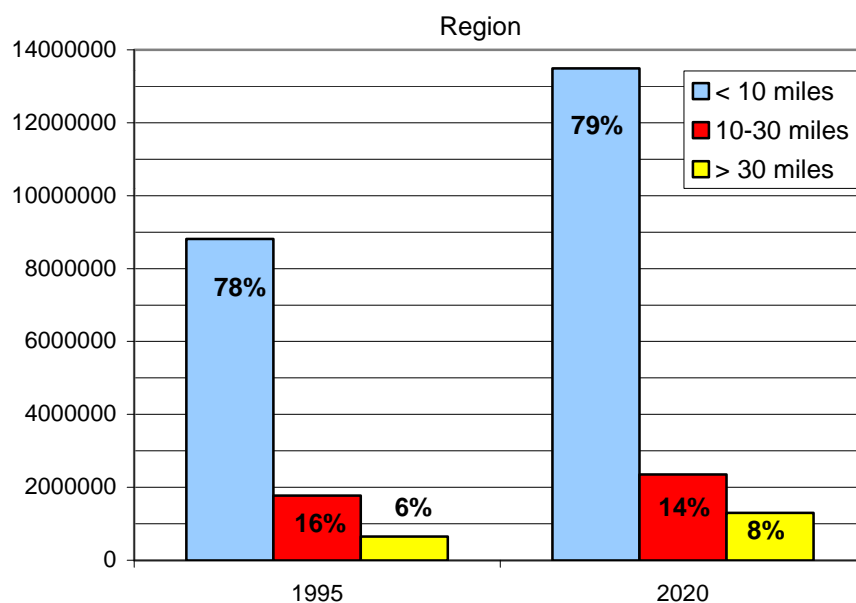
(Source: PRSC Model)

Travel Market Analysis

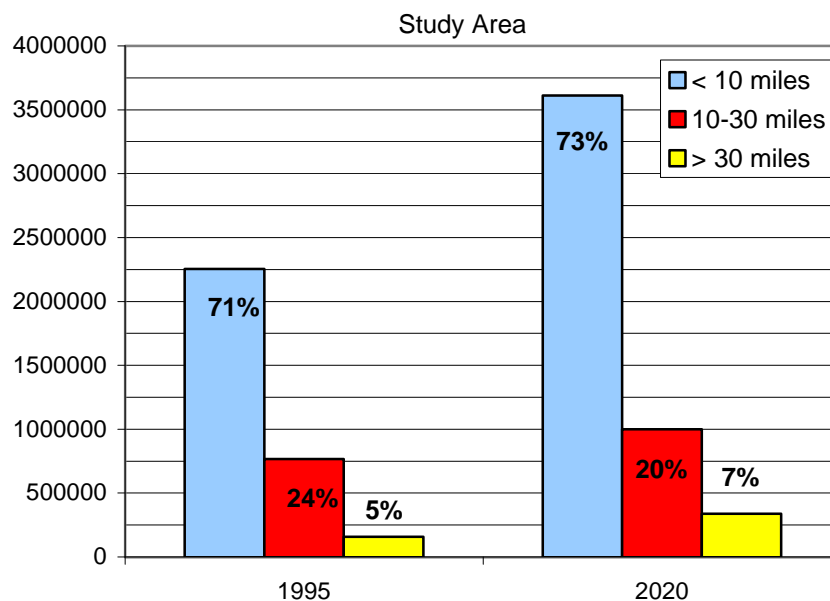


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Total Daily Person Trips



Total Daily Person Trips



1995 and 2020 No-Action Total Daily Person Trips by Trip Length Region vs. Study Area

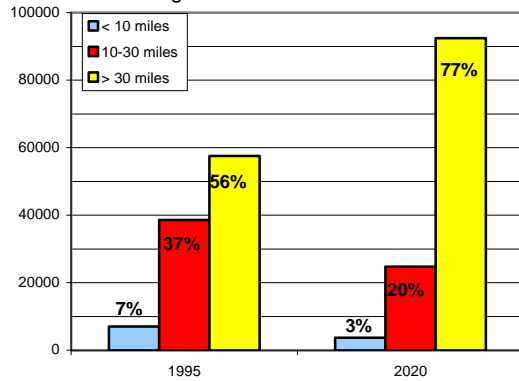
(Source: PSRC Model)

Travel Markets Analysis



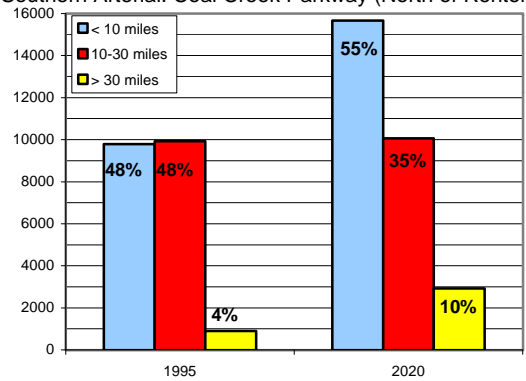
Total Daily Vehicle Trips

South Segment: I-405 Near Renton



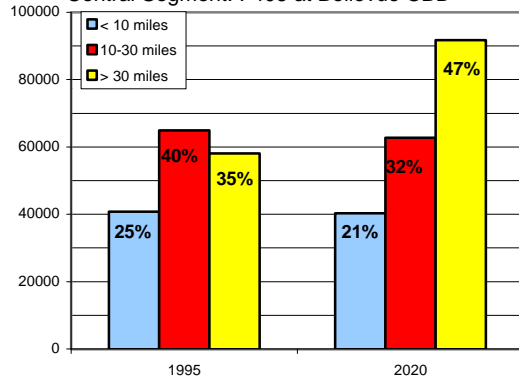
Total Daily Vehicle Trips

Southern Arterial: Coal Creek Parkway (North of Renton)



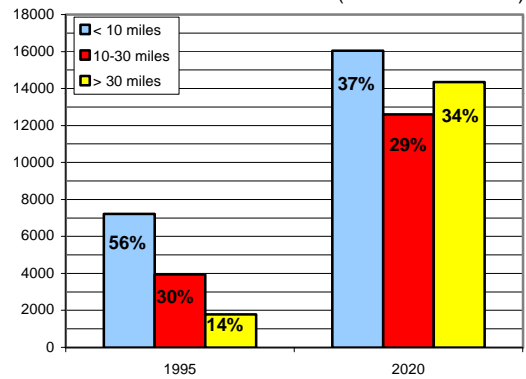
Total Daily Vehicle Trips

Central Segment: I-405 at Bellevue CBD



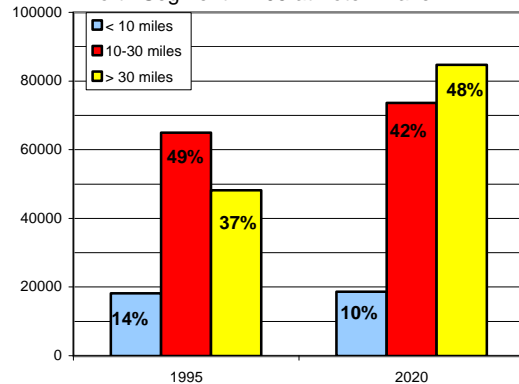
Total Daily Vehicle Trips

Central Arterial: 148th Ave NE (North of NE 8th St)



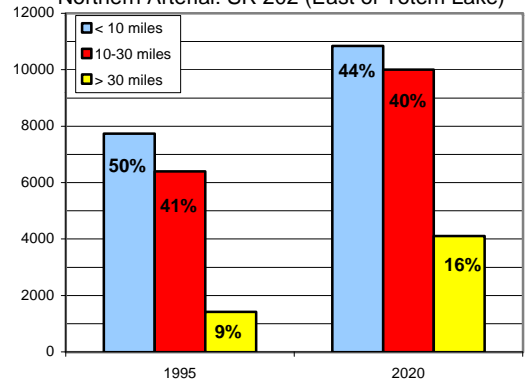
Total Daily Vehicle Trips

North Segment: I-405 at Totem Lake



Total Daily Vehicle Trips

Northern Arterial: SR 202 (East of Totem Lake)



1995 and 2020 No-Action Total Daily Vehicle Trips by Trip Length

I-405 vs. Parallel Arterial

(Source: PSRC Model)

Travel Markets Analysis



Total Daily Person Trips by Mode

I-405 Corridor Program

1995					
	Non-Carpool	Carpool (3+)	Transit	Total	% of Region
Study Area	2,747,014	13,166	24,286	2,784,465	28.0%
Percentage	98.7%	0.5%	0.9%	100.0%	
Outside Study Area	6,886,689	26,447	255,504	7,168,640	72.0%
Percentage	96.1%	0.4%	3.6%	100.0%	
Total Region	9,633,703	39,613	279,789	9,953,105	100.0%
Percentage	96.8%	0.4%	2.8%	100.0%	

2020 No-Action					
	Non-Carpool	Carpool (3+)	Transit	Total	% of Region
Study Area	4,069,348	88,608	87,237	4,245,193	29.0%
Percentage	95.9%	2.1%	2.1%	100.0%	
Outside Study Area	9,674,408	148,031	564,448	10,386,887	71.0%
Percentage	93.1%	1.4%	5.4%	100.0%	
Total Region	13,743,756	236,639	651,685	14,632,080	100.0%
Percentage	93.9%	1.6%	4.5%	100.0%	

Note: Not included in this table are School, Truck and Taxi trips. Non-carpool includes 1 and 2 occupant vehicles.

Source: PSRC Model

Total Work Person Trips by Mode

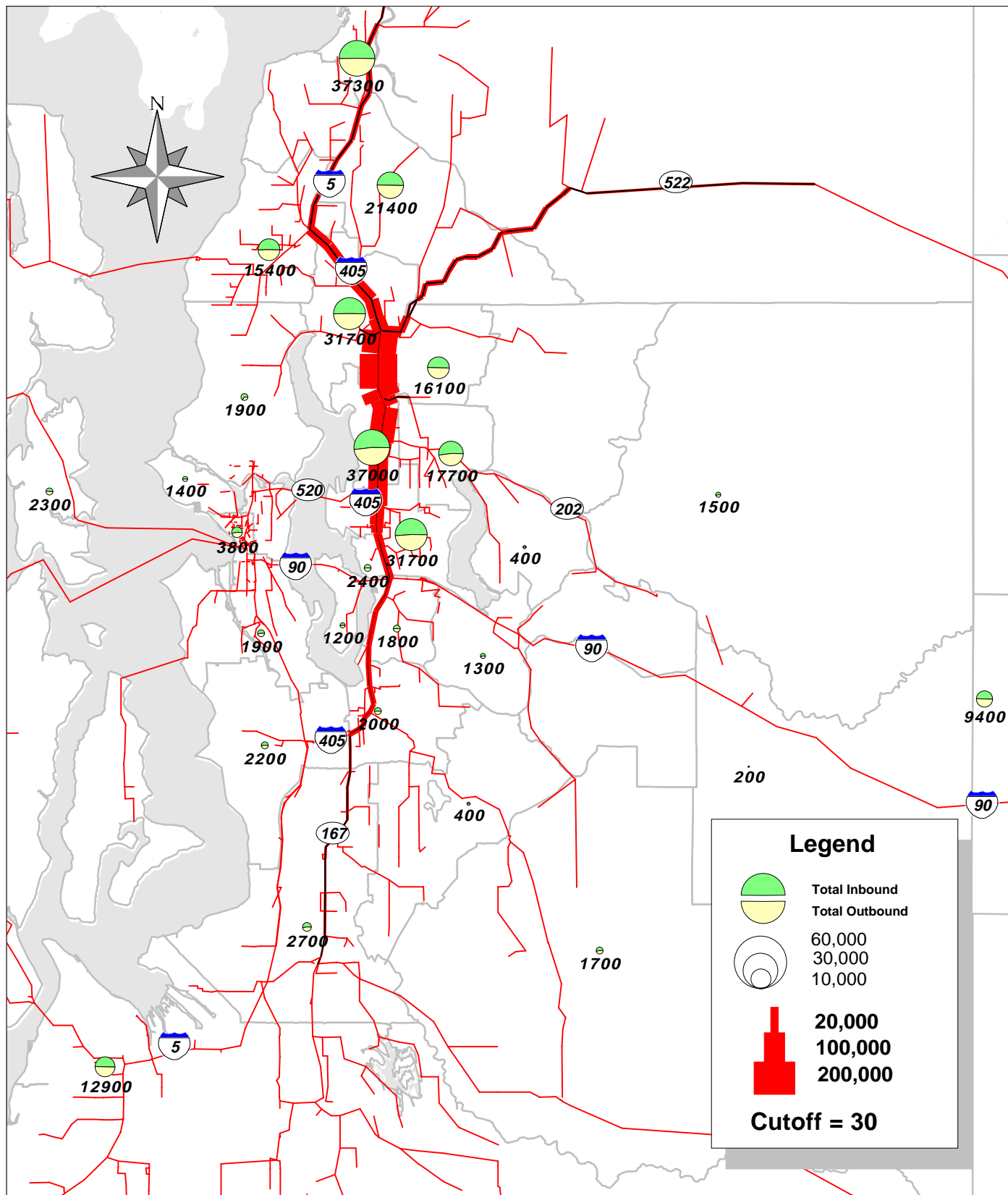
I-405 Corridor Program

1995					
	Non-Carpool	Carpool (3+)	Transit	Total	% of Region
Study Area	591,733	13,166	20,698	625,597	29.8%
Percentage	94.6%	2.1%	3.3%	100.0%	
Outside Study Area	1,306,788	26,447	140,637	1,473,872	70.2%
Percentage	88.7%	1.8%	9.5%	100.0%	
Total Region	1,898,521	39,613	161,335	2,099,469	100.0%
Percentage	90.4%	1.9%	7.7%	100.0%	

2020 No-Action					
	Non-Carpool	Carpool (3+)	Transit	Total	% of Region
Study Area	805,907	88,608	66,704	961,219	30.1%
Percentage	83.8%	9.2%	6.9%	100.0%	
Outside Study Area	1,796,559	148,031	284,765	2,229,355	69.9%
Percentage	80.6%	6.6%	12.8%	100.0%	
Total Region	2,602,465	236,639	351,470	3,190,574	100.0%
Percentage	81.6%	7.4%	11.0%	100.0%	

Note: Not included in this table are School, Truck and Taxi trips. Non-carpool includes 1 and 2 occupant vehicles.

Source: PSRC Model



Wed 09/01/1999

0 7.0 14.0 29.2 mi

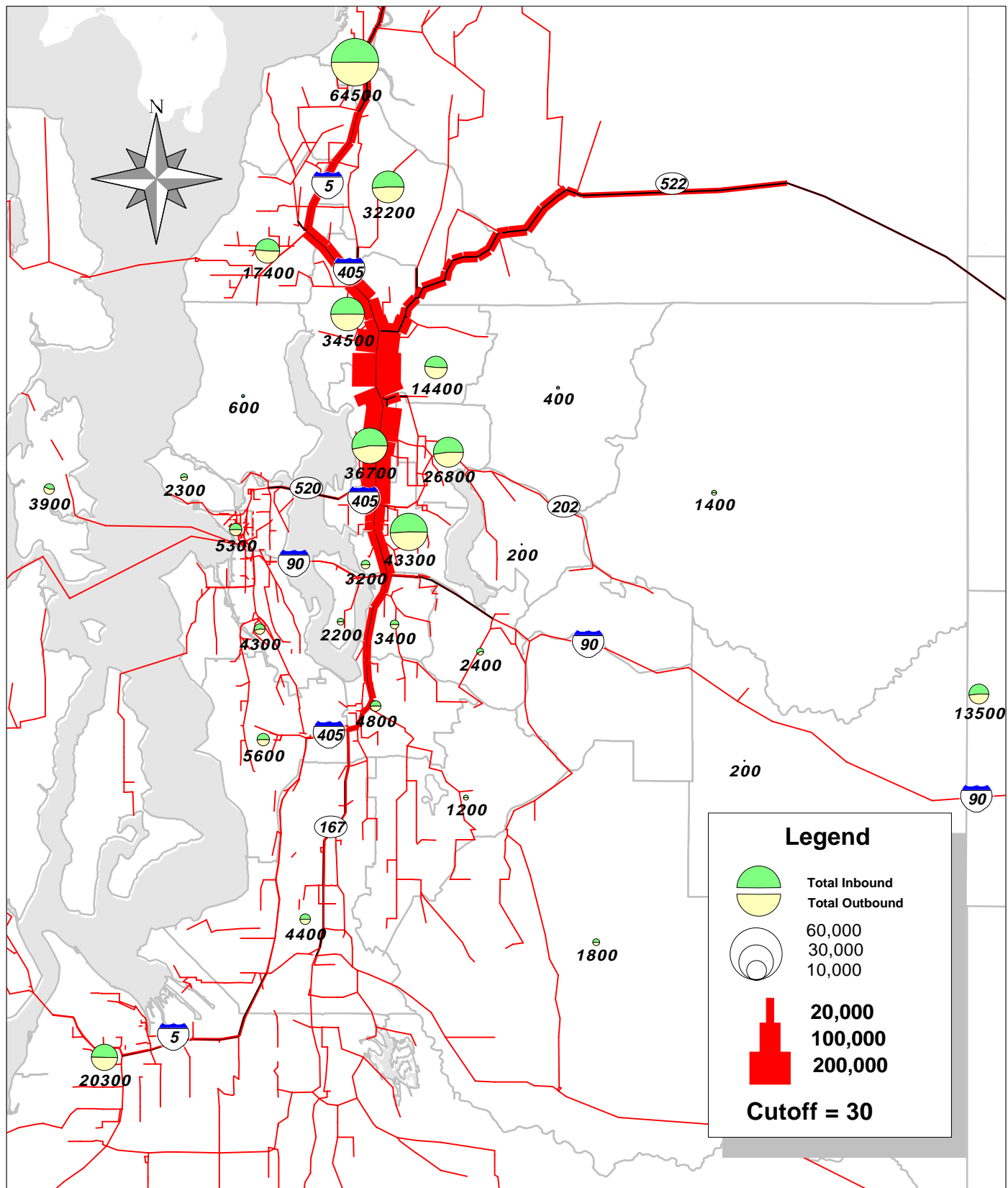
1995 Total Daily Vehicle Trips

Select Link Analysis - North of Totem Lake

(Source: 1995 PSRC Model)

Travel Market Analysis





Thu 09/02/1999

0 7.0 14.0 29.2 mi

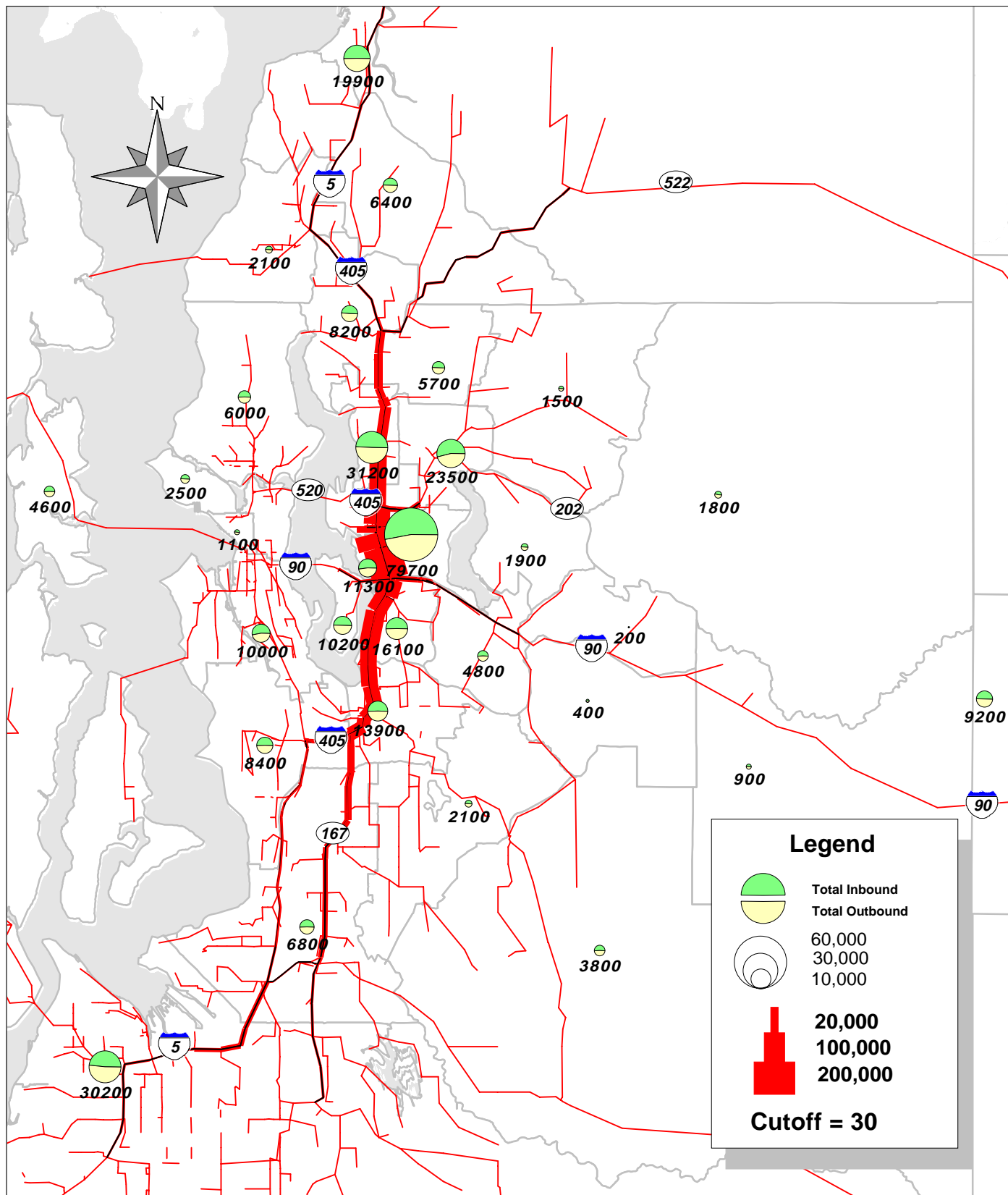
2020 Total Daily Vehicle Trips

Select Link Analysis - North of Totem Lake

(Source: PSRC Model for 2020 No-Action Alt.)

Travel Market Analysis





Wed 09/01/1999

0 7.0 14.1 29.3 mi

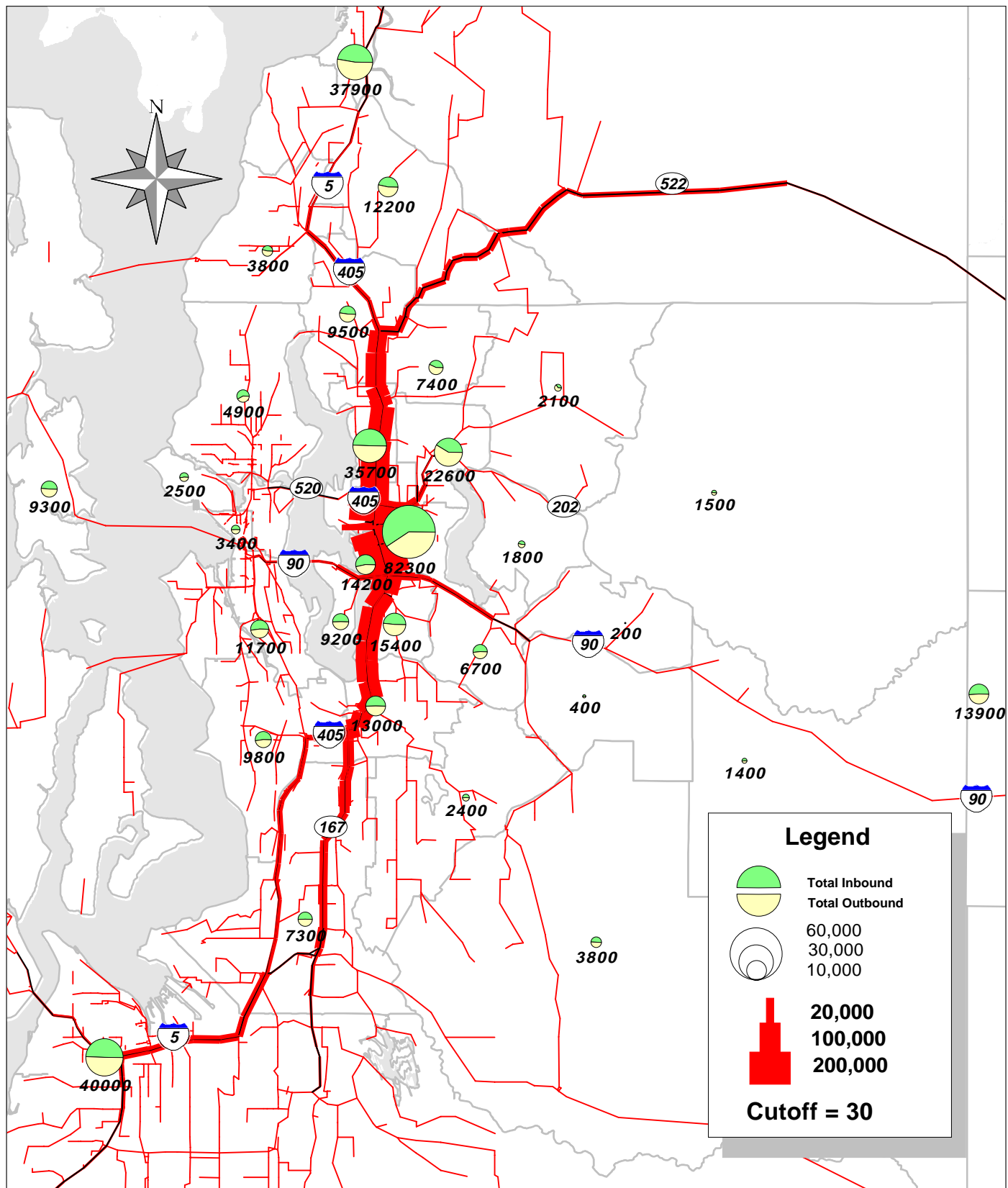
1995 Total Daily Vehicle Trips

Select Link Analysis - Bellevue CBD

(Source: 1995 PSRC Model)

Travel Market Analysis





Thu 09/02/1999

0 7.1 14.1 29.4 mi

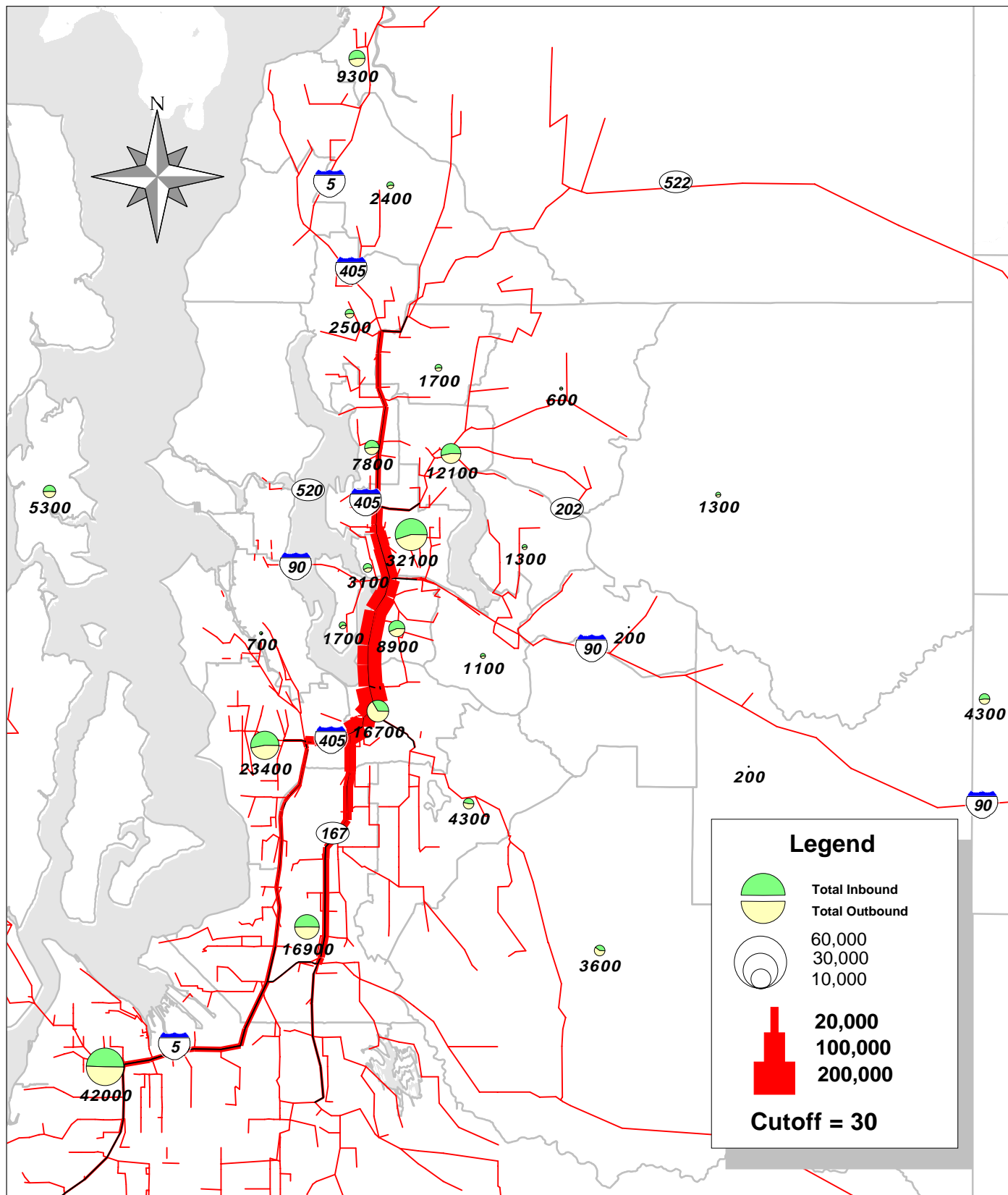
2020 Total Daily Vehicle Trips

Select Link Analysis - Bellevue CBD

(Source: PSRC Model for 2020 No-Action Alt.)

Travel Market Analysis





Wed 09/01/1999

0 7.0 14.0 29.1 mi

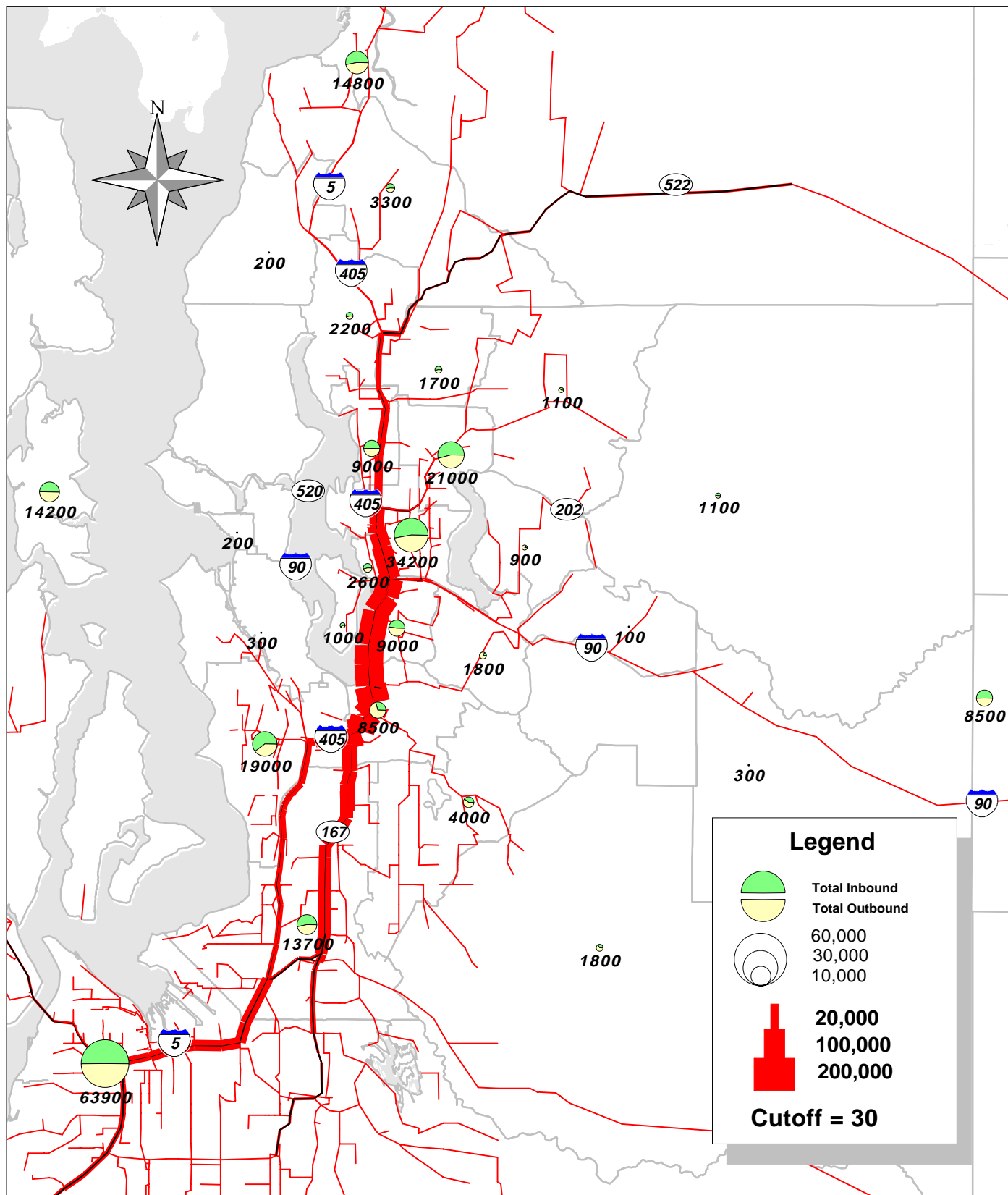
1995 Total Daily Vehicle Trips

Select Link Analysis - North of Renton

(Source: 1995 PSRC Model)

Travel Market Analysis





Thu 09/02/1999

0 7.0 14.0 29.1 mi

2020 Total Daily Vehicle Trips

Select Link Analysis - North of Renton

(Source: PSRC Model for 2020 No-Action Alt.)

Travel Market Analysis

